

We claim:

1. A recombinant expression vector comprising one or more enhancers linked to the 5' end of a
5 ubiquitin promoter operably linked to a DNA sequence encoding a therapeutic gene.
2. The recombinant expression vector of claim 1, wherein the ubiquitin promoter is isolated
from a gene selected from the group consisting of human ubiquitin A, ubiquitin B and
ubiquitin C.
3. The recombinant expression vector of claim 2, wherein the enhancer is selected from the
10 group consisting of a cytomegalovirus (CMV) enhancer, an elongation factor 1-alpha
enhancer; endothelial enhancers and liver-specific enhancers.
4. The recombinant expression vector of claim 3, wherein the enhancer is a CMV enhancer.
5. The recombinant expression vector of claim 4, wherein the expression vector has been
altered to eliminate at least one CpG sequence present in the native sequences.
- 15 6. The recombinant expression vector of claim 4, wherein the ubiquitin promoter is isolated
from human ubiquitin B.
7. The recombinant expression vector of claim 4, wherein the therapeutic gene is selected from
the group consisting of factor VIIa, factor VIII, and factor IX.
8. The recombinant expression vector of claim 4, wherein the therapeutic gene is selected from
20 the group consisting of glucocerebrosidase, alpha-galactosidase, acid alpha-glucosidase,
alpha-n-acetylgalactosaminidase, acid sphingomyelinase and alpha-iduronidase.
9. The recombinant expression vector of claim 4, wherein the therapeutic gene is selected from
the group consisting of CFTR, dystrophin and alpha-1-antitrypsin.

10. A recombinant expression vector comprising a CMV enhancer linked to the 5' end of a promoter isolated from human ubiquitin B operably linked to a DNA sequence encoding alpha-galactosidase.
11. A recombinant expression vector comprising a CMV enhancer linked to the 5' end of a
5 promoter isolated from human ubiquitin B operably linked to a DNA sequence encoding glucocerebrosidase.